CLAIMS

1. A television tuner comprising:

a country table listing a plurality of countries;

multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table, the channel-to-frequency mapping tables being indexed by the country table so that selection of a country in the country table references an associated channel-to-frequency mapping table for the selected country; and

a tuning device to tune to a particular frequency within the channel-to-frequency mapping table associated with the selected country upon selection of a corresponding channel.

2. A television tuner as recited in claim 1, wherein the country table lists the countries according to a uniquely assigned country code.

3. A television tuner as recited in claim 1, wherein the country table lists the countries according to an International Telecommunications Union (ITU) code.

4. A television tuner as recited in claim 1, wherein the channel-to-frequency mapping tables also contain a television standard for the associated countries.

5. A television tuning component for a television tuning system, comprising:

a country table listing a plurality of countries; and

multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table, the channel-to-frequency mapping tables being indexed by the country table so that selection of a country in the country table references an associated channel-to-frequency mapping table for the selected country and selection of a channel in the channel-to-frequency mapping table maps to a corresponding frequency.

6. A television tuning component as recited in claim 5, wherein the country table lists the countries according to a uniquely assigned country code.

7. A television tuning component as recited in claim 5, wherein the country table lists the countries according to an International Telecommunications Union (ITU) code.

8. A television tuning component as recited in claim 5, wherein the channel-to-frequency mapping tables also contain a television standard for the associated countries.

9. A television tuning component as recited in claim 5, embodied in software as a dynamic linked library stored on a computer-readable storage medium.

10. A television tuner incorporating the television tuning component as recited in claim 5.

11. A tuner, comprising:

tuner circuitry to tune to various television frequencies carrying television video signals;

a tuner module coupled to adjust the tuner circuitry to scan multiple channels within a particular locale for corresponding tuning frequencies, the tuner module storing the tuning frequencies for the particular locale.

12. A tuner as recited in claim 11, wherein:

upon transporting the tuner to a new locale, the tuner module scans multiple channels within the new local for corresponding tuning frequencies; and

upon transporting the tuner back to the particular locale, the tuner retrieves the stored tuning frequencies to restore operation in the particular locale.

13. A television tuning system comprising:

tuner circuitry to tune to various television frequencies carrying television video signals;

video decoder circuitry coupled to receive a television video signal from the tuner circuitry and to convert the television video signal to digital video data;

a tuner module coupled to adjust the tuner circuitry to a particular television frequency;

a video decoder module to decode the digital video data according to a particular video standard;

wherein the tuner module has a country table listing a plurality of countries and multiple channel-to-frequency mapping tables that provide video standards and correlate channel numbers to corresponding frequencies for associated countries in the country table, the channel-to-frequency mapping tables being indexed by the country table so that selection of a country in the country table references an associated channel-to-frequency mapping table for the selected country; and

wherein the tuner module selects a channel-to-frequency mapping table based upon input of a particular country and outputs a video standard to the video decoder for use in decoding the digital video data, the tuner module further selecting a television frequency from the selected channel-to-frequency mapping table based upon input of a corresponding channel and outputting the selected television frequency to the tuner circuitry to cause the tuner circuitry to tune to the selected television frequency.

14. A television tuning system as recited in claim 13, wherein the country table lists the countries according to an International Telecommunications Union (ITU) code.

15. A television tuning system as recited in claim 13, wherein the tuner module is embodied as a dynamic linked library.

16. A television tuning system as recited in claim 13, further comprising a second tuner module different from the tuner module, the second tuner module being used to replace the tuner module during upgrade without replacing the tuning circuitry and the decoding circuitry.

17. A television tuning system as recited in claim 13, wherein the tuner module supports an application program interface to expose functionality of the tuner module to an application program.

18. A television tuning system as recited in claim 13, wherein the tuner module stores a set of television frequencies that map to corresponding channels within the particular country for subsequent retrieval.

19. A television tuning manager for a television tuner, the television tuning manager being implemented in software stored on a computer-readable storage medium, the television tuning device comprising:

a country table listing a plurality of countries;

multiple channel-to-frequency mapping tables correlating channel numbers to corresponding frequencies for associated countries in the country table, the channel-to-frequency mapping tables being indexed by the country table so that selection of a country in the country table references an associated channel-to-frequency mapping table for the selected country;

a code segment to select a channel-to-frequency mapping table based upon input of a particular country; and

a code segment to output a broadcast frequency from the selected channel-to-frequency mapping table based upon input of a corresponding channel.

20. A television tuning manager as recited in claim 19, wherein the country table lists the countries according to a uniquely assigned country code.

21. A television tuning manager as recited in claim 19, wherein the country table lists the countries according to an International Telecommunications Union (ITU) code.

22. A television tuning manager as recited in claim 19, wherein the channel-to-frequency mapping tables also contain a television standard for the associated countries.

23. A television tuning manager as recited in claim 19, further comprising a code segment to store a set of broadcast frequencies that map to corresponding channels within the particular country for subsequent retrieval.

24. A television tuning manager as recited in claim 19, embodied as a software dynamic linked library stored on a computer-readable storage medium.

25. A television tuning manager as recited in claim 19, embodied as a computer software module that is dynamically accessible by an application program, the television tuning manager further comprising an application program interface to expose functionality of the television tuning manager to the application program.

26. An application program interface for a television tuning system, the application program interface being embodied on a computer-readable medium and having methods for performing the following functions:

setting a current TV channel;

retrieving the current TV channel;

setting a country code;

retrieving the country code;

setting a storage index for regional channel to frequency mappings; and

retrieving the storage index.

27. An application program interface for a television tuning system, the application program interface being embodied on a computer-readable medium and having methods for performing the following functions:

retrieving all analog video TV standards supported by the tuning system;

retrieving a current analog video TV standard in use;

setting a current TV channel;

retrieving the current TV channel;

retrieving highest and lowest channels available;

scanning for a precise signal on the current TV channel's frequency;

setting a country code;

retrieving the country code;

setting a storage index for regional channel to frequency mappings;

retrieving the storage index;

retrieving a number of TV sources plugged into the tuning system;

setting a type of tuning system;

retrieving the type of tuning system;

retrieving a current video frequency; and

retrieving a current audio frequency.

28. A method comprising the following steps:

receiving an ITU (International Telecommunications Union) code for a particular country; and

selecting, based on the ITU code, a set of TV channel-to-TV frequency mappings for use in the particular country.

29. A method as recited in claim 28, further comprising the step of selecting, based on the ITU code, a TV standard for use in the particular country.

30. A method as recited in claim 28, further comprising the step of storing the selected set of TV channel-to-TV frequency mappings.

31. A computer-readable medium having computer-executable instructions for performing the steps in the method as recited in claim 28.

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32. A method comprising the following steps:

receiving a reference to a country;

selecting, based on the country reference, a set of channel-to-frequency mappings correlating channels to corresponding TV frequencies in the country;

receiving a channel; and

selecting, based on the channel, a TV frequency that maps to the channel;

33. A method as recited in claim 32, further comprising the step of tuning to the TV frequency.

34. A method as recited in claim 32, wherein the country reference is an ITU (International Telecommunications Union) code.

35. A method as recited in claim 32, further comprising the step of selecting, based on the country reference, a TV standard for the country.

36. A method as recited in claim 32, further comprising the step of scanning for a better quality frequency within the channel.

37. A method as recited in claim 32, wherein the step of selecting a set of channel-to-frequency mappings comprises the following steps:

looking up the country in a country table that lists multiple countries; and

indexing from an entry for the country in the country table to a particular channel-to-frequency table, the particular channel-to-frequency table containing mappings of channel numbers to TV frequencies for the country.

38. A method as recited in claim 37, wherein the step of selecting a TV frequency comprises the step of looking up in the particular channel-to-frequency table a TV frequency that corresponds to the channel.

39. A computer-readable medium having computer-executable instructions for performing the steps in the method as recited in claim 32.

40. A method comprising the following steps:

configuring a tuning system for operation in a first locale by determining tuning frequencies for an associated set of channels;

storing the tuning frequencies for the first locale;

upon transporting the tuning system to a second locale, reconfiguring the tuning system for operation in the second locale; and

upon transporting the tuning system back to the first locale, retrieving the stored tuning frequencies to restore operation in the first locale.

41. A method as recited in claim 40, wherein the configuring step comprises the step of scanning for optimal tuning frequencies for the associated set of channels.

42. A computer-readable medium having computer-executable instructions for performing the steps in the method as recited in claim 40.

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